

10/598561

22 Feb 07

DIVISION

PATENT
Atty. Docket No. H-KN-00175 US**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

2007 FEB 22 PM 11:29

APPLICANT(s): Kazuhiro ABE, et al.

EXAMINER: To Be Determined

SERIAL NO.: 10/598,561

ART UNIT: To Be Determined

FILING DATE: September 5, 2006

FILING DATE
UNDER 35 USC 371: March 2, 2005

TITLE: MEDICAL SUTURING TOOL

Mail Stop 16
Director of the USPTO
P.O. Box 1450
Alexandria, VA 22313-1450**REQUEST FOR REFUND**

Honorable Director:

Applicant herewith submits the within request for refund of overpayment of filing fees for the subject application. Applicant mistakenly indicated that there were 16 claims in excess of twenty (20) in the amount of \$50 per claim. Attached is a copy of the fee calculation page filed electronically. Also attached is a copy of the claims as filed.

Applicant herewith requests a refund in the amount of \$800 to be credited to Deposit Account No. 190254 500726 pursuant to 37 CFR §1.26(a).

Respectfully submitted,

Date: Feb 16, 2007

Edward S. Jarmolowicz
Edward S. Jarmolowicz, Esq.
Atty. Registration No. 47,238
Attorney for Applicant
TYCO HEALTHCARE GROUP LP
15 Hampshire Street
Mansfield, MA 02048
Tel: (508) 261-8476

CERTIFICATE OF MAILING UNDER 37 CFR §1.8

The undersigned hereby certifies that this correspondence is being transmitted to the United States Patent and Trademark Office by regular mail to: Mail Stop 16, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450 on the date set forth below.

By: *Julie D. Parker*
Julie D. Parker

Date: Feb 16, 2007

BEST AVAILABLE COPY



United States Patent and Trademark Office

[Home](#) | [Site Index](#) | [Search](#) | [FAQ](#) | [Glossary](#) | [Guides](#) | [Contacts](#) | [eBusiness](#) | [eBiz Alerts](#) | [News](#) | [Help](#)[Portal Home](#)[Patents](#)[Trademarks](#)[Sign-Off Authenticated Session](#)

Patent eBusiness

- [Electronic Filing](#)
- [Patent Application Information \(PAIR\)](#)
- [Patent Ownership](#)
- [Fees](#)
- [Supplemental Resources & Support](#)

Patent Information

- [Patent Guidance and General Info](#)
- [Codes, Rules & Manuals](#)
- [Employee & Office Directories](#)
- [Resources & Public Notices](#)

Patent Searches

- [Patent Official Gazette](#)
- [Search Patents & Applications](#)
- [Search Biological Sequences](#)
- [Copies, Products & Services](#)

Other

- [Copyrights](#)
- [Trademarks](#)
- [Policy & Law](#)
- [Reports](#)

- ☐ EFS RegisteredPlease Read
AnnouncementsApplication
DataAttach
DocumentsReview
DocumentsCalc
Fe

Calculate Fees

If you are not paying fees for this fi

Failure to pay these fees on filing a new

A submission has not been filed officially at the USPTO until USPTO. The Acknowledgement Receipt is evidence of this subSelect business size: ☒ Large Entity ☐ Small Entity [?](#)

Fee Calculator

☒ National Stage 371 Patent Application Filing Fees

- ☒ Basic National Stage Fee
- ☐ Search - US was ISA or IPEA and all claims satisfy PCT Article
- ☐ Search - US was the ISA
- ☐ Search - Report Prepared and Provided to USPTO
- ☒ Search - All Other Situations
- ☐ Exam - US was ISA or IPEA and all claims satisfy PCT Article :
- ☐ Exam - All Other Situations

Application Size Fee - Number of Pages in the Specification

Was this application originally filed in paper?

	<input type="radio"/> Yes	<input checked="" type="radio"/> No
35	* .75	= 27

Claims (select all that apply)

- Claims in excess of twenty 16 * \$50 = \$
- Independent claims in excess of three 0 * \$200 = \$
- ☐ Multiple Dependent Claims(\$360)

Miscellaneous Fees: (select all that apply)

- ☒ Oath or declaration after thirty months from priority date (\$

☐ English Translation after thirty months from priority date (\$

☐ **Petition Filing Fees** (select all that apply)

[Privacy Policy](#)

[Cancel](#)

If you need help:

- Call the Patent Electronic Business Center at (866) 217-919.
- Send general questions about USPTO programs to the [USPTO](#).
- If you experience technical difficulties or problems with this, 786-9199.

You can suggest USPTO webpages or material you would like featured on this section by E-mail to the webmaster@uspto.gov other improvements on the

[Home](#) | [Site Index](#) | [Search](#) | [eBusiness](#) | [Help](#) | [Privacy Policy](#)

Electronic Acknowledgement Receipt

EFS ID:	1184689
Application Number:	10598561
Confirmation Number:	7239
Title of Invention:	MEDICAL SUTURING TOOL
First Named Inventor:	Kazuhiro ABE
Customer Number:	54964
Filer:	Edward Jarmolowicz
Filer Authorized By:	
Attorney Docket Number:	H-KN-00175 US
Receipt Date:	05-SEP-2006
Filing Date:	
Time Stamp:	11:46:34
Application Type:	U.S. National Stage under 35 USC 371
International Application Number:	PCT/EP05/02180

Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$ 1730
RAM confirmation Number	840
Deposit Account	500726
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 and 1.17	

File Listing:

BEST AVAILABLE COPY

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part	Pages
1	Abstract	HKN-00175Abstract.pdf	28433	no	1
Warnings:					
Information:					
2	Application Data Sheet	HKN-00175ADS.pdf	52006	no	3
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
3	Claims	HKN-00175Claims.pdf	43331	no	4
Warnings:					
Information:					
4	Drawings	hkn-00175FIGURES.PDF	204196	no	14
Warnings:					
Information:					
5	Specification	HKN-00175Spec.pdf	130100	no	30
Warnings:					
Information:					
6	Fee Worksheet (PTO-875)	fee-info.pdf	8492	no	2
Warnings:					
Information:					
Total Files Size (In bytes):			466558		

BEST AVAILABLE COPY

CLAIMS

1. A medical suturing tool (10) comprising:
 - an insertion puncture needle (13) formed with an insertion hole (13a) extending from a proximal end to a distal end thereof;
 - a retrieval puncture needle (14) disposed substantially in parallel with the insertion puncture needle at a predetermined distance therefrom; and
 - a surgical suture (16) extending from the proximal end of the insertion puncture needle through the distal end and then engaged with the distal end of the retrieval puncture needle (14) via an engaging portion (15), wherein pulling on the suture causes the engaging portion to emerge from the insertion needle (13) and extend across to the retrieval needle (14) so that, with withdrawal of the retrieval needle (14), the suture is advanced from a puncture made by the insertion needle (13) to a puncture made by the retrieval needle (14).
2. A tool according to claim 1, further comprising:
 - an elongate opening (18) provided on a surface of the insertion puncture needle (13) opposing to the retrieval puncture needle (14) in communication with the insertion hole (13a);
 - an engaging member (15) being capable of moving in the insertion hole of the insertion puncture needle and, when having reached a predetermined position in the insertion hole, bending from the side of the upper end portion thereof to project outside from the elongate opening; and
 - an engaging groove (19) provided on a surface of the retrieval puncture needle (14) opposing to the insertion puncture needle (13), wherein the surgical suture (16) is connected to the lower end of the engaging member so that the suturing tool engages with the engaging groove on the retrieval puncture needle after having passed from the proximal end to the distal end of the insertion puncture needle together with the engaging member.
3. A tool according to claim 2, wherein the engaging groove (19) includes a storage recess capable of accommodating the engaging member (15) and an engaged portion (19c) with which the upper end portion of the engaging member can engage.

4. A tool according to claim 2, wherein the upper end portion (19a) of the engaging member is thicker than the lower side portion (19b) of the engaging member, the elongate opening of the insertion puncture needle (13) including a wide upper portion (18a) through which the upper end portion of the engaging member can pass and a narrow lower portion (18b) through which the upper end portion of the engaging member cannot pass and the lower side portion of the engaging member can pass, and the engaging groove of the retrieval puncture needle (14) including a wide upper portion (19a) through which the upper end portion of the engaging member can enter and a narrow lower portion (19b) through which the upper end portion of the engaging member cannot pass but the lower side portion can enter.
5. A tool according to claim 4, wherein the upper end portion (15a) of the engaging member comprises a spherical body and the lower side portion (15b) of the engaging member comprises a rod member having smaller diameter than the spherical body.
6. A tool according to claim 4, wherein an engaging wall is provided at the lower portion of the surface of the wide upper portion of the engaging groove of the retrieval puncture needle (14) so that the upper end portion of the engaging member is prevented from coming off toward the outside from the wide upper portion of the engaging groove.
7. A tool according to claim 2, wherein the portion on the distal side of the insertion puncture needle (13) with respect to the elongate opening and at least part of the retrieval puncture needle (14) other than the portion where the engaging groove is formed is formed as a solid portion.
8. A tool according to claim 2, wherein at least a portion of the insertion puncture needle (13) where the elongate opening is formed and of at least a portion of the retrieval puncture needle (14) where the engaging groove is formed are formed into an angular C-shape in lateral cross section, respectively, and are arranged so that the open sides are opposed to each other.

9. A tool according to claim 1, wherein needle points of the insertion puncture needle (13) and the retrieval puncture needle (14) are formed into a pointed conical shape or a tapered thin blade shape.
10. A tool according to claim 1, wherein at least one of the insertion puncture needle (13) and the retrieval puncture needle (14) is formed by connecting a metal member and a resin member.
11. A tool according to claim 1, wherein the insertion puncture needle (13) and the retrieval puncture needle (14) are releasably attached to a retaining member (11, 12, 41).
12. A tool according to claim 11, wherein the retaining member is constituted of a grip member (41) to be held by a hand.
13. A tool according to claim 11, further including a positioning member for regulating the mounting positions of the insertion puncture needle (13) and the retrieval puncture needle (14) with respect to the retaining member.
15. A tool according to claim 11, wherein a plurality of pairs of the insertion puncture needle (13) and the retrieval puncture needle (14) are provided on the retaining member.
16. A medical suturing tool (10) comprising an insertion puncture needle (13) with a shaft having a proximal end and a pointed distal end, and a retrieval puncture needle (14) with a shaft having a proximal end and a pointed distal end, and a retaining member (11) that connects the respective proximal ends to retain the respective shafts parallel, wherein the insertion needle shaft has an elongate aperture (18) in its wall surface facing the retrieval needle shaft, the retrieval needle shaft has an aperture (19) in its wall surface facing the insertion needle shaft, the respective shafts each defining a lumen from the proximal end to the respective aperture, and the insertion needle lumen (13a) contains an elongate lock part (15) long enough to bridge across from the insertion needle aperture (18) to the retrieval needle aperture (19), the insertion

needle lumen containing a suture (16) which is attached to the lock part (15) whereby pulling on the suture causes the lock part to emerge from the insertion needle lumen and extend across to the retrieval needle aperture (19) so that, with withdrawal of the retrieval needle (14), the suture (16) is advanced from a puncture made by the insertion needle (13) to a puncture made by the retrieval needle (14).

BEST AVAILABLE COPY

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	10/598,561;
		Filing Date	09/05/2006;
		First Named Inventor	Kazuhiro ABE
		Art Unit	To Be Determined
		Examiner Name	To Be Assigned
Total Number of Pages in This Submission	10	Attorney Docket Number	H-KN-00175 US

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks - Request for Refund with supporting documentation		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	Tyco Healthcare Group LP	
Signature	<i>Edward S. Jarmolowicz</i>	
Printed name	Edward S. Jarmolowicz	
Date	2/16/2007	
Reg. No.		47,238

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:	
Signature	<i>Julie D. Parker</i>
Typed or printed name	Julie D. Parker
Date	2/16/2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief, Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

BEST AVAILABLE COPY